



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Frank O'Bannon  
Governor

Lori F. Kaplan  
Commissioner

August 20, 2003

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Milestone Contractors, L.P. / 005-17423-00052

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot 8/11/03

August 20, 2003

Mr. Ron Terrell  
Milestone Contractors, L.P.  
P.O. Box 421459  
Indianapolis, Indiana 46242-1459

Re: 005-17423-00052  
Second Significant Permit Revision to  
FESOP 005-14110-00052

Dear Mr. Terrell:

Milestone Contractors, L.P. was issued a permit on December 12, 2002 for a hot mix asphalt concrete manufacturing operation. A letter requesting changes to this permit was received on April 2, 2003. Pursuant to the provisions of 326 IAC 2-8-11.1(f) the permit is hereby revised as follows:

Milestone Contractors, L.P. has submitted a request to:

- (a) remove one (1) 0.45 MMBtu/hr No. 2 fuel oil fired heater (Heater No. 17),
- (b) remove one (1) of their existing 26,000 gallon horizontal liquid asphalt storage tanks (Tank 16),
- (c) add one (1) 1.86 MMBtu/hr No. 2 fuel oil fired heater, to be identified as heater No. 17, and
- (d) add two (2) new 20,000 gallon vertical liquid asphalt storage tanks, to be identified as Tanks 16 and 17.

The proposed equipment will not cause any increases in production or emissions from the existing units.

Therefore, the emissions generated by the proposed modification are the particulate matter (PM), PM10, volatile organic compound (VOC), carbon monoxide (CO), and hazardous air pollutant (HAP) emissions generated by the proposed tanks, and the proposed heater combustion emissions.

The estimated PM, PM10, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO, single HAP, and combined HAP UPTE (0.16, 0.16, 4.13, 1.16, 0.70, 0.36, 0.02, and 0.02 tons per year) are less than their respective 326 IAC 2-8-11.1(d) Minor Permit Revision low end applicable levels of 5, 5, 10, 10, 10, 25, 10, and 25 tons per year, there are no changes to any existing conditions that are required, and there are no new applicable requirements that are triggered.

However, the natural gas and re-refined oil limits have been adjusted to ensure that the source NO<sub>x</sub> and SO<sub>2</sub> emissions are still less than their respective Part 70 applicable level of 100 tons per year.

Establishing these limits as a federally enforceable, requires public notification. Since neither an Administrative Amendment nor a Minor Permit Revision require public notification, it is determined that adding the proposed limits cannot be accomplished via these approvals.

Therefore, the proposed modification shall be incorporated into the existing FESOP via a Significant Permit Revision pursuant to 326 IAC 2-8-11.1(f)(1) which states changes to an existing source FESOP that are not an Administrative Amendment or a Minor Permit Revision shall be incorporated into the existing source FESOP via a Significant Permit Revision.

To incorporate the proposed modification into the permit, the following changes shall be made. All added information is indicated in bold type. All deleted information is struck-out.

**(1) Condition A.3:**

Condition A.3 shall be revised as follows to remove existing heater 17, remove existing Tank 16, add new heater 17, and add new tanks 16 and 17.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) one (1) distillate No. 2 fuel oil fired liquid asphalt tank heater, identified as emission unit No. 13, rated at 1.3 MMBtu per hour, exhausting at two (2) stacks, identified as S-2A and S-2B;
- (b) two (2) distillate No. 2 fuel oil fired liquid asphalt tank heaters, identified as emission unit Nos. 15 and 17, rated at 0.45 **and 1.86** MMBtu per hour, **respectively each, and with each the emissions from heater 15 being exhausted through** at two (2) stacks, identified as S-4A **and** S-4B, **and the emissions from heater 17 being exhausted through two (2) stacks, identified as** S-6A, and S-6B;
- (c) ~~threefour~~ **(34)** liquid asphalt storage tanks, identified as Tank 12, Tank 14, ~~and~~ Tank 16, **and Tank 17**, each with **respective** a maximum storage capacities of 26,000, **26,000, 20,000, and 20,000** gallons;

.....

**(2) Condition D.1.5:**

Condition D.1.5 shall be amended as follows to revise the natural gas usage limit from 697 MMcf per consecutive 12 month period to 688 MMcf per consecutive 12 month period. After the public comment period, Milestone proposed a fuel use limit equivalent to 90 tons per year of NOx.

Therefore, Condition D.1.5 shall be amended to revise the natural gas usage limit further from 688 MMcf per consecutive 12 month period to 624 MMcf per consecutive 12 month period.

D.1.5 Natural Gas Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of natural gas to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to ~~697~~**24.0** million cubic feet (MMCF) per twelve (12) consecutive month period, rolled on a monthly basis. For purposes of determining compliance, the following shall apply:

.....

**(3) Condition D.1.6:**

Condition D.1.6 shall be amended as follows to revise the re-refined oil usage limit from 1,707,711 U.S. gallons per consecutive 12 month period to 1,631,550 gallons per consecutive 12 month period. After the public comment period, Milestone proposed a fuel use limit equivalent to 90 tons per year of SO<sub>2</sub>.

Therefore, Condition D.1.6 shall be amended as follows to revise the re-refined oil usage limit from 1,631,550 gallons per consecutive 12 month period to 1,468,359 gallons per consecutive 12 month period.

D.1.6 Re-refined Waste Oil Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of re-refined waste oil to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to ~~1,707,468,211~~**359** U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis based on a maximum oil sulfur content of 0.75%.

.....

**(4) Unit Description of Section D.3:**

The unit description of Section D.3 shall be amended as follow to include proposed tanks 16 and 17.

**SECTION D.3 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

- ~~(ea)~~ one (1) re-refined waste oil storage tank, identified as Tank 22, constructed in 2000, with a maximum storage capacity of 21,000 gallons, exhausting at one (1) stack.
- (b) Two (2) liquid asphalt storage tanks, identified as Tank 16 and Tank 17, each with a maximum storage capacity of 20,000 gallons.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**(5) Condition D.3.1:**

Condition D.3.1 shall be amended as follows to remove the 40 CFR 60.116b(d) requirements and to add proposed tanks 16 and 17.

D.3.1 Record Keeping Requirements [326 IAC 12][40 CFR 60.110b, Subpart Kb]

- ~~(a)~~ Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the **owner or operator shall for one (1) re-refined waste oil storage tank (Tanks 22), 16, and 17, with a vapor pressure of less than 15.0 kPa, is subject to 40 CFR Part 60.116b, paragraphs (a), (b), and (d) which require record keeping keep readily accessible records showing the dimension and capacity of the storage tanks.**
- ~~(b)~~ To document compliance with paragraph (a) above, the Permittee shall maintain permanent records at the source in accordance with (1) through (3) below:
  - ~~(1) the dimension of the storage vessel;~~
  - ~~(2) an analysis showing the capacity of the storage vessel; and~~
  - ~~(3) the true vapor pressure of each VOC stored in the one (1) re-refined waste oil storage tank (Tank 22), indicating that the maximum true vapor pressure of VOC is less than 15.0 kPa.~~
- ~~(c)~~ **All Said** records shall be maintained in accordance with Section C - General Record Keeping Requirements; of this permit **except that the records specified in this condition shall be kept for the life of the respective tanks.**

**(6) SO2 Re-refined Oil and Equivalent Usage Limit Quarterly Report :**

The SO2 re-refined oil and equivalent usage limit quarterly report shall be amended as follows to reflect the latest re-refined oil usage limit. ....

Limits: sulfur content of No. 2 distillate fuel not to exceed 0.5%; sulfur content of re-refined waste oil not to exceed 0.75%; and ~~4,707,211~~**1,468,359** gallons of re-refined waste oil and re-refined waste oil equivalent per last 12 consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.6(a) through (c) shall be used such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified. ....

**(7) NOx Natural Gas and Equivalent Usage Limit Quarterly Report :**

The NOx natural gas and equivalent usage limit quarterly report shall be amended as follows to reflect the latest natural gas usage limit. ....

Limits: ~~69724.0~~ million cubic feet (MMCF) of natural gas and natural gas equivalents per last twelve (12) consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.5(a) through (d) shall be used such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified.  
.....

**(8) Table of Contents:**

The Table of Contents shall be adjusted to reflect the changes to the condition that were made under First Significant Permit Revision 005-15124-00052.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Fulton, at (800) 451-6027, press 0 and ask for Scott Fulton or extension (3-5691), or dial (317) 233-5691.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

SDF

cc: File - Bartholomew County  
U.S. EPA, Region V  
Bartholomew County Health Department  
Air Compliance Section Inspector - Vaughn Ison  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michelle Boner

**FEDERALLY ENFORCEABLE STATE  
OPERATING PERMIT (FESOP)  
OFFICE OF AIR QUALITY**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 1-800-451-6027

**Milestone Contractors, L.P.  
5245 North Indianapolis Road  
Columbus, Indiana 47201**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F005-14410-00052	Date Issued: December 12, 2002
First Significant Permit Revision No.: F005-15124-00052	Date Issued: March 18, 2002
Second Significant Permit Revision No.: F005-17423-00052	Affected Pages: 2, 3, 4, 5, 6, 24, 25, 26, 27, 28, 29, 32, 37, and 38
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 20, 2003

## **SECTION A SOURCE SUMMARY**

- A.1 General Information [326 IAC 2-8-3(b)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]
- A.4 FESOP Applicability [326 IAC 2-8-2]
- A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

## **SECTION B GENERAL CONDITIONS**

- B.1 Permit No Defense [IC 13]
- B.2 Definitions [326 IAC 2-8-1]
- B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-8-6]
- B.5 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3 (h)]
- B.6 Severability [326 IAC 2-8-4(4)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)]
- B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]
- B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]
- B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]
- B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]
- B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]
- B.14 Emergency Provisions [326 IAC 2-8-12]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
- B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
- B.17 Permit Renewal [326 IAC 2-8-3(h)]
- B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]
- B.19 Operational Flexibility [326 IAC 2-8-15]
- B.20 Permit Revision Requirement [326 IAC 2-8-11.1]
- B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [I13-14-2-2]
- B.22 Transfer of Ownership or Operation [326 IAC 2-8-10]
- B.23 Annual Fee Payment [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

## **SECTION C SOURCE OPERATION CONDITIONS**

### **Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- C.1 Particulate Emission Limitations For Manufacturing Processes with Process Weight
- C.2 Overall Source Limit [326 IAC 2-8]
- C.3 Opacity [326 IAC 5-1]
- C.4 Open Burning [326 IAC 4-1][IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
- C.6 Fugitive Dust Emissions [326 IAC 6-4]
- C.7 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
- C.8 Operation of Equipment [326 IAC 2-8-5(a)(4)]
- C.9 Stack Height [326 IAC 1-7]
- C.10 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

### **Testing Requirements [326 IAC 2-8-4(3)]**

- C.11 Performance Testing [326 IAC 3-6]

### **Compliance Requirements [326 IAC 2-1.1-11]**

- C.12 Compliance Requirements [326 IAC 2-1.1-11]

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

- C.13 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
- C.14 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
- C.15 Pressure Gauge Specifications

**Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]**

- C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.17 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
- C.18 Compliance Response Plan -Preparation, Implementation, Records, and Reports
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

- C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
- C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

**Stratospheric Ozone Protection**

- C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

**SECTION D.1 FACILITY OPERATION CONDITIONS - Aggregate and RAP Mixing and Drying**

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- D.1.1 Particulate Matter [326 IAC 12][40 CFR 60.92, Subpart I]
- D.1.2 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4]
- D.1.3 Opacity [326 IAC 12][40 CFR 60.92, Subpart I]
- D.1.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1]
- D.1.5 Natural Gas Usage [326 IAC 2-8-4]
- D.1.6 Re-refined Waste Oil Usage [326 IAC 2-8-4]
- D.1.7 Recycled Asphalt Pavement (RAP) Throughput [326 IAC 2-8-4]
- D.1.8 Preventive Maintenance [326 IAC 2-8-4(9)]

**Compliance Determination Requirements**

- D.1.9 Particulate Matter [326 IAC 12][40 CFR 60, 40 CFR 51]
- D.1.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 12][40 CFR 60]
- D.1.11 Used Oil Requirements [329 IAC 13-8]

**Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]**

- D.1.12 Daily Visible Emissions Notations
- D.1.13 Pressure Drop Readings
- D.1.14 Preventive Inspections
- D.1.15 Control Equipment Failure Detection
- D.1.16 Particulate Matter
- D.1.17 Fuel Oil Sampling and Analysis [326 IAC 3-3]

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

- D.1.18 Operational Parameters
- D.1.19 Natural Gas Usage
- D.1.20 Distillate and Residual Fuel Oil Usage
- D.1.21 Recycled Asphalt Pavement (RAP) Throughput
- D.1.22 Quarterly Reporting



## **SECTION D.2 FACILITY OPERATION CONDITIONS - Cold Mix Asphalt Storage**

### **Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 8-5-2]**

- D.2.1 Volatile Organic Compound (VOC)
- D.2.2 Cold-Mix (Stockpile Mix) Asphalt Concrete Usage

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

- D.2.3 Record keeping Requirements
- D.2.4 Quarterly Reporting

## **SECTION D.3 FACILITY OPERATION CONDITIONS - Storage Tank**

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

- D.3.1 Record Keeping Requirements [326 IAC 12][40 CFR 60.110b, Subpart Kb]

## **SECTION D.4 FACILITY OPERATION CONDITIONS - Insignificant Activity - Degreasing**

### **Emission Limitations and Standards [326 IAC 2-8-4(1)]**

- D.4.1 Volatile Organic Compounds (VOC)

#### **Certification Form**

#### **Emergency Occurrence Form**

#### **Quarterly Report Form**

#### **Quarterly Deviation and Compliance Monitoring Report Form**

#### **ATTACHMENT A - ASPHALT PLANT SITE FUGITIVE DUST CONTROL PLAN**

## SECTION A SOURCE SUMMARY

### A.1 General Information

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The Permittee owns and operates a hot mix asphalt concrete manufacturing operation

Responsible Official: Ron Terrell, Senior Manager of Asphalt Plants  
Source Address: 5245 N. Indianapolis Road, Columbus, Indiana 47201  
Mailing Address: P.O. Box 421459, Indianapolis, Indiana 46242-1459  
SIC Code: 2951  
County Location: Bartholomew  
County Status: Attainment for all criteria pollutants  
Source Status: Synthetic Minor Source, FESOP Program

### A.2 Emission Units and Pollution Control Summary

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The stationary source consists of the following emission units and pollution control devices:

- (a) one (1) aggregate counter-flow drum mixer, identified as emission unit No. 2, with a maximum capacity of 450 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 135 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) baghouse with a primary dust collector for air pollution control, exhausting at one (1) stack, identified as S-1, one (1) draglat conveyor, three (3) feed conveyors, and one (1) screen;
- (b) cold-mix (stockpile mix) asphalt storage piles; and
- (c) one (1) aggregate counter-flow recycled asphalt pavement (RAP) drum mixer, identified as emission unit No. 30, with a maximum capacity of 225 tons per hour, equipped with one (1) natural gas fired RAP dryer burner with a maximum rated capacity of 75.6 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) baghouse with a primary dust collector for air pollution control, exhausting at one (1) stack, identified as S-1.

### A.3 Insignificant Activities

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This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) one (1) distillate No. 2 fuel oil fired liquid asphalt tank heater, identified as emission unit No. 13, rated at 1.3 MMBtu per hour, exhausting at two (2) stacks, identified as S-2A and S-2B;
- (b) two (2) distillate No. 2 fuel oil fired liquid asphalt tank heaters, identified as emission unit Nos. 15 and 17, rated at 0.45 and 1.86 MMBtu per hour, respectively with the emissions from heater 15 being exhausted through two (2) stacks, identified as S-4A and S-4B, and the emissions from heater 17 being exhausted through two (2) stacks, identified as S-6A, and S-6B;
- (c) four (4) liquid asphalt storage tanks, identified as Tank 12, Tank 14, Tank 16, and Tank 17, with respective maximum storage capacities of 26,000, 26,000, 20,000, and 20,000 gallons;
- (d) aggregate storage piles;
- (e) four (4) hot mix asphalt cement storage silos each with a maximum storage capacity of 300 tons;
- (f) one (1) cold feed bin consisting of eight (8) compartments;
- (g) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons;
- (h) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (i) one (1) natural gas fired space heater rated at 0.1 MMBtu per hr located in the laboratory;

- (j) combustion source flame safety purging on startup;
- (k) application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings;
- (l) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (parts washer using non-HAP Safety Kleen or Crystal Clean solvent);
- (m) cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or; having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (n) closed loop heating and cooling systems;
- (o) paved and unpaved roads and parking lots with public access; and
- (p) a laboratory as defined in 326 IAC 2-7-1(20)(C).

A.4 FESOP Applicability [326 IAC 2-8-2]

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This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

## SECTION D.1 FACILITY OPERATION CONDITIONS

one (1) aggregate counter-flow drum mixer, identified as emission unit No. 2, with a maximum capacity of 450 tons per hour, equipped with one (1) natural gas fired aggregate dryer burner with a maximum rated capacity of 135 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) baghouse with a primary dust collector for air pollution control, exhausting at one (1) stack, identified as S-1.

one (1) draglat conveyor, three (3) feed conveyors, and one (1) screen.

one (1) aggregate counter-flow recycled asphalt pavement (RAP) drum mixer, identified as emission unit No. 30, with a maximum capacity of 225 tons per hour, equipped with one (1) natural gas fired RAP dryer burner with a maximum rated capacity of 75.6 million (MM) British thermal units (Btu) per hour using No. 2 distillate fuel oil and re-refined waste oil as back-up fuels and one (1) baghouse with a primary dust collector for air pollution control, exhausting at one (1) stack, identified as S-1.

### Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

#### D.1.1 Particulate Matter [326 IAC 12][40 CFR 60.92, Subpart I]

Pursuant to 326 IAC 12, (40 CFR Part 60.92, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the particulate matter emissions from the aggregate and RAP mixing and drying operations exhausting through stack S-1, shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf). This is equivalent to a particulate matter emission rate of 15.45 pounds per hour.

#### D.1.2 Particulate Matter 10 Microns (PM-10) [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4, particulate matter 10 microns emissions from the aggregate mixing and drying operation and the RAP mixing and drying operation, both exhausting through stack S-1, shall not exceed 18.34 pounds per hour, including both filterable and condensable fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

#### D.1.3 Opacity [326 IAC 12][40 CFR 60.92, Subpart I]

Pursuant to 326 IAC 12, (40 CFR Part 60.92, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the aggregate and RAP mixing and drying operations shall not discharge or cause the discharge into the atmosphere any gases which exhibit 20 percent opacity or greater.

#### D.1.4 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1]

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall each be limited to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5 percent when using distillate oil. Also, the sulfur dioxide emissions from the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall each be limited to 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 1.31 percent when using re-refined waste oil. This source has accepted a sulfur content limit of 0.75 percent when using re-refined waste oil.

Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown, and malfunction.

#### D.1.5 Natural Gas Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of natural gas to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to 624.0 million cubic feet (MMCF) per twelve (12) consecutive month period, rolled on a monthly basis. For purposes of determining compliance, the following shall apply:

- (a) every 1,000 gallons of No. 2 distillate fuel oil burned in the aggregate dryer burner shall be equivalent to 0.0857 MMCF of natural gas based on NO<sub>x</sub> emissions such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified;
- (b) every 1,000 gallons of re-refined waste oil burned in the aggregate dryer burner shall be equivalent to 0.0679 MMCF of natural gas based on NO<sub>x</sub> emissions such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified;
- (c) every 1,000 gallons of No. 2 distillate fuel oil burned in the RAP dryer burner shall be equivalent to 0.2 MMCF of natural gas based on NO<sub>x</sub> emissions such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified; and
- (d) every 1,000 gallons of re-refined waste oil burned in the RAP dryer burner shall be equivalent to 0.19 MMCF of natural gas based on NO<sub>x</sub> emissions such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 will not apply.

#### D.1.6 Re-refined Waste Oil Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of re-refined waste oil to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to 1,468,359 U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis based on a maximum oil sulfur content of 0.75%. The sulfur content of the re-refined waste oil used in the 135 MMBtu per hour burner for the aggregate dryer and the 75.6 MMBtu per hour burner for the RAP dryer shall not exceed 0.75 percent. For purposes of determining compliance, the following shall apply:

- (a) every 1,000 gallons of No. 2 distillate fuel oil burned in the aggregate dryer burner shall be equivalent to 711.7 gallons of re-refined waste oil based on SO<sub>2</sub> emissions and a maximum sulfur content of 0.5% such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified;
- (b) every MMCF of natural gas burned in the aggregate dryer burner or in the RAP dryer burner shall be equivalent to 5.4 gallons of re-refined waste oil based on SO<sub>2</sub> emissions such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.
- (c) every 1,000 gallons of No. 2 distillate fuel oil burned in the RAP dryer burner shall be equivalent to 643.7 gallons of re-refined waste oil based on SO<sub>2</sub> emissions and a maximum sulfur content of 0.5% such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

Therefore, the requirements of 326 IAC 2-7 will not apply.

**D.1.7 Recycled Asphalt Pavement (RAP) Throughput [326 IAC 2-8-4]**

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Pursuant to 326 IAC 2-8-4(1), the throughput of recycled asphalt pavement (RAP) to the RAP dryer shall be limited to 1,769,520 tons per twelve (12) consecutive month period, rolled on a monthly basis. Therefore, the requirements of 326 IAC 2-7 will not apply.

**D.1.8 Preventive Maintenance [326 IAC 2-8-4(9)]**

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A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this source.

**Compliance Determination Requirements**

**D.1.9 Particulate Matter [326 IAC 12][40 CFR 60, 40 CFR 51]**

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During the period no later than 180 days after start up of the RAP drum mixer and dryer or the throughput to the aggregate drum mixer is increased, whichever occurs first, in order to demonstrate compliance with conditions D.1.1, D.1.2, and D.1.3, the Permittee shall perform PM and PM-10 testing on the baghouse exhausting through stack S-1 utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10.

**D.1.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 12][40 CFR 60]**

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The Permittee shall test for:

- (a) Sulfur content of oil burned as fuel by the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer using 40 CFR Part 60, Appendix A, Method 19 for each load of oil delivered; or
- (b) Sulfur dioxide emissions from the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer, using 40 CFR Part 60, Appendix A, Method 6 each time a test to comply with Condition D.1.6 is performed.

Sulfur content tests may be made by the oil supplier.

**D.1.11 Used Oil Requirements [329 IAC 13-8]**

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Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

- (1) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),
- (2) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and
- (3) Maintain records pursuant to 329 IAC 13-8-6 (Tracking).
- (4) The waste oil burned in the aggregate dryer/mixer burner and the RAP dryer/mixer burner shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). The burning of mixtures of used oil and hazardous waste that is regulated by 329 IAC 3.1 is prohibited at this source.

## **Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]**

### **D.1.12 Daily Visible Emissions Notations**

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Daily visible emission notations of the conveyors, transfer points, aggregate storage piles, unpaved roads, and the aggregate and RAP mixing and drying operations stack exhaust, shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, 80% of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

### **D.1.13 Pressure Drop Readings**

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The Permittee shall take readings of the total static pressure drop across the baghouse controlling the aggregate and RAP mixing and drying operation, at least once a day when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 8.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with condition C.11 - Pressure Gauge Specifications, be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

### **D.1.14 Preventive Inspections**

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The following inspections shall be performed when the aggregate and RAP mixing and drying operation is operating in accordance with the Preventive Maintenance Plan prepared pursuant to Condition B.13:

Daily (during operating season):

- (a) Check trickle valve (if applicable) for free operation.

Monthly (during operating season):

- (a) Check to see the tubes (if applicable) are not clogged or worn;
- (b) Check to see the settling chamber (if applicable) has no undue amount of accumulation;
- (c) Check the duct work for holes, wear, and tightness; and
- (d) Check the cyclone (if applicable) for wear.

Appropriate corrective actions shall be taken in accordance with Condition C.12.

#### D.1.15 Control Equipment Failure Detection

In the event that failure of the control equipment has been observed:

- (a) The operation will be shut down as soon as practicable, as indicated in the Preventive Maintenance plan, until the controls have been repaired.
- (b) Based upon the findings of the inspection, any additional corrective actions will be devised within twelve (12) hours of discovery and will include a timetable for completion.

#### D.1.16 Particulate Matter

Pursuant to CP-005-2331, issued on April 14, 1992, the baghouse controlling the aggregate dryer and RAP dryer emissions shall be in operation at all times when the asphalt plant is in operation.

#### D.1.17 Fuel Oil Sampling and Analysis [326 IAC 3-3]

Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with 326 IAC 3-3-4. If a partially empty fuel tank is refilled, a new sample and analysis is required upon filling. Vendor analysis of each load delivered is acceptable, in lieu of the above, if accompanied by a certification.

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

#### D.1.18 Operational Parameters

- (a) The Permittee shall maintain a daily record for the baghouse controlling particulate matter emissions from aggregate and RAP mixing and drying operations of the following values to document compliance with Conditions D.1.12 and D.1.13:
  - (1) Baghouse inlet temperature;
  - (2) Inlet and outlet differential static pressure;
  - (3) Visible observations;
  - (4) Checklist with dates and initials for each preventive action performed; and
  - (5) Records of corrective actions.
- (b) To document compliance with Condition D.1.14, the Permittee shall maintain records of the results of the inspections required under Condition D.1.14.

#### D.1.19 Natural Gas Usage

- (a) To document compliance with Condition D.1.5, complete and sufficient records shall be kept to establish compliance with the natural gas usage limit established in this permit and contain a minimum of the following:
  - (1) Calendar dates covered in the compliance determination period; and
  - (2) Monthly usage and calculated natural gas equivalent.



#### D.1.20 Distillate and Residual Fuel Oil Usage

- (a) To document compliance with Conditions D.1.4 and D.1.6, complete and sufficient records shall be kept to establish compliance with the re-refined waste oil usage limits and sulfur dioxide emission limit established in this permit and contain a minimum of the following:
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Monthly usage and calculated re-refined waste oil equivalent;
  - (3) A certification (if available), signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
  - (4) Fuel supplier certifications (if available).
- (b) The supplier certification (if available) shall contain, as a minimum, the following:
  - (1) The name of the oil supplier; and
  - (2) A statement from the oil supplier that certifies the sulfur content and heat content of the fuel oil.

#### D.1.21 Recycled Asphalt Pavement (RAP) Throughput

- (a) To document compliance with condition D.1.7, complete and sufficient records shall be kept to establish compliance with the recycled asphalt pavement (RAP) throughput limit for the RAP dryer established in this permit and contain a minimum of the following:
  - (1) Calendar dates covered in the compliance determination period; and
  - (2) Monthly RAP throughput to the RAP dryer.

#### D.1.22 Quarterly Reporting

A quarterly summary to document compliance with operation conditions numbers D.1.5, D.1.6, and D.1.7 shall be submitted, to the address listed in Section C - General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

## **SECTION D.3 FACILITY OPERATION CONDITIONS**

### **Facility Description [326 IAC 2-8-4(10)]:**

- (a) one (1) re-refined waste oil storage tank, identified as Tank 22, constructed in 2000, with a maximum storage capacity of 21,000 gallons, exhausting at one (1) stack.
- (b) Two (2) liquid asphalt storage tanks, identified as Tank 16 and Tank 17, each with a maximum storage capacity of 20,000 gallons.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

#### **D.3.1 Record Keeping Requirements [326 IAC 12][40 CFR 60.110b, Subpart Kb]**

Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the owner or operator shall for Tanks 22, 16, and 17, keep readily accessible records showing the dimension and capacity of the storage tanks.

Said records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit except that the records specified in this condition shall be kept for the life of the respective tanks.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
FESOP Quarterly Report**

Source Name: Milestone Contractors, L.P.  
Source Address: 5245 N. Indianapolis Road, Columbus, Indiana 47201  
FESOP No.: F005-5503-00052  
Facility: 135 million Btu per hour burner for the aggregate dryer and 75.6 MMBtu per hour burner for the RAP dryer  
Parameter: sulfur dioxide (SO<sub>2</sub>)  
Limits: sulfur content of No. 2 distillate fuel not to exceed 0.5%; sulfur content of re-refined waste oil not to exceed 0.75%; and 1,468,359 gallons of re-refined waste oil and re-refined waste oil equivalent per last 12 consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.6(a) through (c) shall be used such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

YEAR: \_\_\_\_\_

Month	Column 1		Column 2		Column 1 + Column 2	
	Re-refined waste oil and equivalent usage this month (gallons)		Re-refined waste oil and equivalent usage previous 11 months (gallons)		12 month total Re-refined waste oil and equivalent usage (gallons)	
	Waste Oil	Equiv.	Waste Oil	Equiv.	Waste Oil	Equiv.
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION  
FESOP Quarterly Report**

Source Name: Milestone Contractors, L.P.  
Source Address: 5245 N. Indianapolis Road, Columbus, Indiana 47201  
FESOP No.: F005-5503-00052  
Facility: 135 million Btu per hour burner for the aggregate dryer and 75.6 MMBtu per hour burner for the RAP dryer  
Parameter: oxides of nitrogen (NO<sub>x</sub>)  
Limits: 624.0 million cubic feet (MMCF) of natural gas and natural gas equivalents per last twelve (12) consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.5(a) through (d) shall be used such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified.

YEAR: \_\_\_\_\_

Month	Column 1		Column 2		Column 1 + Column 2	
	Natural gas and equivalent usage this month (MMCF)		Natural gas and equivalent usage previous 11 months (MMCF)		12 month total Natural gas and equivalent usage (MMCF)	
	Natural Gas	Equiv.	Natural Gas	Equiv.	Natural Gas	Equiv.
Month 1						
Month 2						
Month 3						

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for Construction and Operation Status

Source Name: Milestone Contractors, L.P.  
Source Location: 5245 North Indianapolis Road, Columbus, IN 47201  
County: Bartholomew  
SIC Code: 2951  
Operation Permit No.: F005-14110-00052  
Date Issued: December 12, 2002  
2<sup>nd</sup> Significant Permit Revision No.: 005-17423-00052  
Permit Reviewer: SDF

On June 26, 2003, the Office of Air Quality (OAQ) had a notice published in the Republic, located in Columbus, Indiana, stating that Milestone Contractors, L.P. had applied for a construction permit to construct and operate proposed heater 17, Tank 16, and Tank 17, and remove existing heater 17 and existing Tank 16. The notice also stated that the OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 23, 2003, Milestone Contractors, L.P. submitted comments on the proposed permit. The comments and the corresponding responses are as follows:

#### **(a) Comment 1:**

Milestone disagrees with the calculations of increased emissions from the additional storage of liquid asphalt cement. The equations utilized for this calculation are found in Table 11.1-14 (Silo filling) of AP-42. Silo filling relates to the storage of hot mix asphalt (final product) which has no increased capacity under this revision as the rating of the facility remains at 450 tons per hour. Storage (in tanks) of liquid asphalt cement (raw material) does not correlate with storage (in silos) of hot mix asphalt (final product).

#### **Response 1:**

To determine the liquid asphalt storage emissions from the proposed tanks, the compound percentages in Table 11.1-16 were used. Foot note "a" of Table 11.1-16 states that the emission factor for the compounds in Table 11.1-16 is determined by multiplying the percentages presented in Table 11.1-16 by the applicable emission factors for total organic compounds as determined from Table 11.1-14.

Table 11.1-16 lists the compound percentages for silo filling "and" asphalt storage tank emissions and does not provide a means of distinguishing one from the other. The silo filling emission factors from Table 11.1-14 only provide emission factors for silo filling and drum mix or batch mix plant load-out. The drum mix or batch mix plant load-out emission factors do not apply. Therefore, the only option available is the use of the silo filling emission factors.

Since there are no other sources of emission factors and the foot note of Table 11.1-16 only allows use of the applicable emission factors of Table 11.1-14, the only emission factors that can be used are the silo filling emission factors. Further, since AP-42 does not state that the only emission factor applicable to the asphalt storage tanks is TOC, the worst case emissions (total PM, TOC, and CO) had to be used to determine the unrestricted potential to emit.

Therefore, the emission calculations are determined to be correct. No changes will be made.

**(b) Comment 2:**

Per the potential increase of emissions from the new hot oil heater, Milestone requests a voluntary limit of 90.0 tons of SO<sub>2</sub> and NO<sub>x</sub> emissions. This request will reduce the fuel oil and natural gas permit limits. This will also allow future insignificant activities changes under an administrative amendment as opposed to a significant revision.

**Response 2:**

The limits shall be adjusted as requested.

To reduce the source SO<sub>2</sub> emissions to 90 tons per year, the re-refined oil usage or it's equivalent shall be limited to a rate that is equivalent to 90 tons per year less the SO<sub>2</sub> emissions from the existing tank heaters (4.89 tons/yr), less the SO<sub>2</sub> emissions due to the proposed modification (4.13 tons/yr).

$$\begin{aligned} X \text{ gal/yr} * 110.3 \text{ lb/1000 gal} * 1/2000 \text{ tons/lb} &= [90.00 \text{ tons/yr} - 4.89 \text{ tons/yr} - 4.13 \text{ tons/yr}] \\ &= 80.98 \text{ tons SO}_2\text{/yr} \\ X &= 1,468,359 \text{ gallons re-refined oil/yr} \end{aligned}$$

The re-refined oil usage limit shall be reduced from 1,631,550 gallons per year to 1,468,359 gallons per year.

Reducing the fuel use limitation and applying all emission controls will reduce the mixing and drying operation PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO, single HAP, and combined HAP emissions to 0.04, 0.03, 80.98, 13.95, 0.73, 3.67, <10, and 8.24 tons per year.

To reduce the source NO<sub>x</sub> emissions to 90 tons per year, the natural gas usage or it's equivalent shall be limited to a rate that is equivalent to 90 tons per year less the NO<sub>x</sub> emissions from the existing tank heaters (1.42 tons/yr) less the NO<sub>x</sub> emissions due to the proposed modification (1.16 tons/yr).

$$\begin{aligned} X \text{ MMcf/yr} * 280 \text{ lb/MMcf} * 1/2000 \text{ ton/lb} &= [90.00 \text{ tons/yr} - 1.42 \text{ tons/yr} - 1.16 \text{ tons/yr}] \\ &= 87.42 \text{ tons/yr} \\ X &= 624 \text{ MMcf/yr} \end{aligned}$$

Reducing the natural gas use limitation and applying all emission controls will reduce the mixing and drying operation combustion PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO, single HAP, and combined HAP emissions to neg., neg., 0.19, 87.36, 1.72, 26.21, <10, and 8.53 tons per year.

The natural gas usage limit shall be reduced from 688 MMcf/yr to 624 MMcf/yr.

The worst case emissions from the mixing and drying operations after application of the limits is listed below.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Re-refined Oil	<b>0.04</b>	<b>0.03</b>	<b>80.98</b>	13.95	0.73	3.67	<10	8.24
Natural Gas	neg.	neg.	0.19	<b>87.36</b>	<b>1.72</b>	<b>26.21</b>	<10	<b>8.53</b>

The source emissions after application of the proposed limitations are listed below.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Agg. Dryer Non-Comb.	44.15	10.25	-	-	17.18	-	-	-
RAP Dryer Non-Comb.	19.82	4.60	-	-	7.71	-	-	-
Agg./RAP Combustion	0.04	0.03	80.98	87.36	1.72	26.21	<10	8.53
Tank/Hot Oil Heaters	0.14	0.23	4.89	1.42	0.03	0.38	<10	0.03
Conveying/Handling	2.02	0.96	-	-	-	-	-	-
Unpaved Roads	81.92	16.37	-	-	-	-	-	-
Aggregate Storage	0.23	0.08	-	-	-	-	-	-
Cold Mix VOC Storage	-	-	-	-	72.16	-	-	-
Modification	0.16	0.16	4.13	1.16	0.70	0.36	<10	0.02
<b>Total</b>	<b>148.48</b>	<b>32.68</b>	<b>90.00</b>	<b>89.94</b>	<b>99.50</b>	<b>26.95</b>	<b>&lt;10</b>	<b>8.56</b>

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

(a) The source, after construction and operation of the proposed modification and implementation of the new fuel use limits, is still not a major PSD stationary source because no criteria pollutant emissions are greater than the applicable level or 250 tons per year or more and it is not one of the 28 listed source categories.

(b) This source, after construction and operation of the proposed modification and implementation of the new fuel use limits, is still not a Part 70 major stationary source because no criteria pollutants exceed the applicable level of 100 tons per year and the single and combined HAP emissions are less than the respective applicable levels of 10 and 25 tons per year.

To incorporate the proposed limit changes into the existing source permit, the following changes shall be made. All additional language is indicated in bold type. All deleted information is struck-out.

**(1) Condition D.1.5:**

Condition D.1.5 shall be amended as follows to revise the natural gas usage limit from 688 MMcf per consecutive 12 month period to 624 MMcf per consecutive 12 month period.

D.1.5 Natural Gas Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of natural gas to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to ~~688~~**24.0** million cubic feet (MMCF) per twelve (12) consecutive month period, rolled on a monthly basis. For purposes of determining compliance, the following shall apply:

.....

**(2) Condition D.1.6:**

Condition D.1.6 shall be amended as follows to revise the re-refined oil usage limit from 1,631,550 gallons per consecutive 12 month period to 1,468,359 gallons per consecutive 12 month period.

D.1.6 Re-refined Waste Oil Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of re-refined waste oil to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to ~~1,631,550~~**1,468,359** U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis based on a maximum oil sulfur content of 0.75%.

.....

**(3) SO2 Re-refined Oil and Equivalent Usage Limit Quarterly Report :**

The SO2 re-refined oil and equivalent usage limit quarterly report shall be amended as follows to reflect the new re-refined oil usage limit.

.....

Limits: sulfur content of No. 2 distillate fuel not to exceed 0.5%; sulfur content of re-refined waste oil not to exceed 0.75%; and ~~1,631,550~~ **1,468,359** gallons of re-refined waste oil and re-refined waste oil equivalent per last 12 consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.6(a) through (c) shall be used such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

.....

**(4) NOx Natural Gas and Equivalent Usage Limit Quarterly Report :**

The NOx natural gas and equivalent usage limit quarterly report shall be amended as follows to reflect the new natural gas usage limit.

.....

Limits: ~~688~~**24.0** million cubic feet (MMCF) of natural gas and natural gas equivalents per last twelve (12) consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.5(a) through (d) shall be used such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified.

.....



## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable Operating Permit (FESOP)**

#### **Source Background and Description**

Source Name:	Milestone Contractors, L.P.
Source Location:	5245 North Indianapolis Road, Columbus, IN 47201
County:	Bartholomew
SIC Code:	2951
Operation Permit No.:	F005-14110-00052
Date Issued:	December 12, 2002
2 <sup>nd</sup> Significant Permit Revision No.:	005-17423-00052
Permit Reviewer:	SDF

The Office of Air Quality (OAQ) has reviewed an application from Milestone Contractors, L.P. relating to the operation of their stationary hot mix asphalt concrete manufacturing operation.

#### **Request**

On April 2, 2003, Milestone Contractors, L.P. submitted a request to:

- (a) remove one (1) 0.45 MMBtu/hr No. 2 fuel oil fired heater (Heater No. 17),
- (b) remove one (1) of their existing 26,000 gallon horizontal liquid asphalt storage tanks (Tank 16),
- (c) add one (1) 1.86 MMBtu/hr No. 2 fuel oil fired heater, to be identified as heater No. 17, and
- (d) add two (2) new 20,000 gallon vertical liquid asphalt storage tanks, to be identified as Tanks 16 and 17.

The proposed equipment will not cause any increases in production or emissions from the existing units.

Therefore, the emissions generated by the proposed modification are the particulate matter (PM), PM10, volatile organic compound (VOC), carbon monoxide (CO), and hazardous air pollutant (HAP) emissions generated by the proposed tanks, and the proposed heater combustion emissions.

The estimated PM, PM10, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO, single HAP, and combined HAP UPTE (0.16, 0.16, 4.13, 1.16, 0.70, 0.36, 0.02, and 0.02 tons per year) are less than their respective 326 IAC 2-8-11.1(d) Minor Permit Revision low end applicable levels of 5, 5, 10, 10, 10, 25, 10, and 25 tons per year, there are no changes to any existing conditions that are required, and there are no new applicable requirements that are triggered.

However, the natural gas and re-refined oil limits have been adjusted to ensure that the source NO<sub>x</sub> and SO<sub>2</sub> emissions are still less than their respective Part 70 applicable level of 100 tons per year.

Establishing these limits as federally enforceable, requires public notification. Since neither an Administrative Amendment nor a Minor Permit Revision require public notification, it is determined that adding the proposed limits cannot be accomplished via these approvals.

Therefore, the proposed modification shall be incorporated into the existing FESOP via a Significant Permit Revision pursuant to 326 IAC 2-8-11.1(f)(1) which states changes to an existing source FESOP that are not an Administrative Amendment or a Minor Permit Revision shall be incorporated into the existing source FESOP via a Significant Permit Revision.

### **Existing Approvals**

The source has been operating under FESOP 005-14110-00052, issued on December 12, 2002 and First Significant Permit Revision 005-15124-00052, issued on March 18, 2002.

### **Recommendation**

The staff recommends to the Commissioner that the Significant Permit Revision be approved.

### **Emission Calculations**

The emissions generated by the proposed modification are the proposed tank PM, PM10, VOC, CO, and HAP emissions and the proposed heater combustion emissions.

#### **(1) Unrestricted Potential to Emit (UPTE):**

##### **(a) Tank PM, PM10, VOC, CO, and HAP Emissions:**

The emissions generated by the proposed tanks are the storage tank filling and storage PM, PM10, VOC, CO, and HAP emissions. The following calculations determine these emissions.

The emissions are determined utilizing AP-42 emission factors which are based on a lb/ton basis. Therefore, before determining the emissions, it is necessary to determine the fraction increase in capacity, the maximum amount liquid asphalt produced per hour, and the maximum amount of liquid asphalt produced per hour that will be moved through the proposed tanks.

##### **Fraction Increase In Capacity:**

The current liquid asphalt storage capacity at Milestone is 78,000 gallons. Milestone is proposing removing one (1) 26,000 gallon storage tank and adding two (2) 20,000 gallon storage tanks. Therefore, the new storage capacity will be 92,000 gallons.

$$78,000 \text{ gallons} - 26,000 \text{ gallons} + 40,000 \text{ gallons} = 92,000 \text{ gallons.}$$

The fraction increase in capacity is estimated to be 0.43.

$$40,000 \text{ gallons} / 92,000 \text{ gallons} = 0.43$$

##### **Maximum Amount of Liquid Asphalt Produced Per Hour:**

The maximum amount of asphalt that can be produced is 450 tons per hour. AP-42 states that 8% of asphalt produced is liquid asphalt. Therefore, the maximum amount of liquid asphalt produced per hour is 36 tons/hr.

$$450 \text{ tons/hr} * 0.08 = 36 \text{ tons/hr}$$

### **Maximum Amount of Liquid Asphalt Produced Per Hour That Will Be Moved Through Proposed Tanks:**

The maximum amount of liquid asphalt produced per hour that will be moved through the proposed tanks is the product of the estimated maximum amount of liquid asphalt produced per hour and the fraction increase in storage capacity, or 15.48 tons per hour.

$$36 \text{ tons/hr} * 0.43 = 15.48 \text{ tons/hr}$$

#### **(1) PM(PM10):**

The following calculations determine the PM(PM10) UPTE based on filling and storage emissions, a maximum amount of liquid asphalt of 15.48 tons/hr, AP-42 methodologies, emissions before controls, and 8760 hours of operation.

$$\begin{aligned} \text{Ef: } & 0.000332 + 0.00105 * (-V) * e((0.0251) * (T + 460) - 20.43) = \\ & 0.000332 + 0.00105 * (-(-0.5)) * e((0.0251) * (325 + 460) - 20.43) = 0.0006 \text{ lb/ton} \end{aligned}$$

where: Ef = emission factor (lb/ton)  
V = default asphalt volatility (-0.5)  
T = default temperature (325)

$$15.48 \text{ tons/hr} * 0.0006 \text{ lb PM/ton} * 1/2000 \text{ ton PM/lb PM} * 8760 \text{ hr/yr} = 0.04 \text{ tons/yr}$$

PM10 is determined to be equal to PM in this case.

#### **(2) VOC:**

The following calculations determine the VOC UPTE based on filling and storage emissions, a maximum amount of liquid asphalt of 15.48 tons/hr, AP-42 methodologies, emissions before controls, and 8760 hours of operation.

$$\begin{aligned} \text{Ef: } & 0.0504 * (-V) * e((0.0251) * (T + 460) - 20.43) = \\ & 0.0504 * (-(-0.5)) * e((0.0251) * (325 + 460) - 20.43) = 0.01 \text{ lb/ton} \end{aligned}$$

where: Ef = emission factor (lb/ton)  
V = default asphalt volatility (-0.5)  
T = default temperature (325)

$$15.48 \text{ tons/hr} * 0.01 \text{ lb VOC/ton} * 1/2000 \text{ ton VOC/lb VOC} * 8760 \text{ hr/yr} = 0.68 \text{ tons/yr}$$

#### **(3) CO:**

The following calculations determine the CO UPTE based on filling and storage emissions, a maximum amount of liquid asphalt of 15.48 tons/hr, AP-42 methodologies, emissions before controls, and 8760 hours of operation.

$$\begin{aligned} \text{Ef: } & 0.00488 * (-V) * e((0.0251) * (T + 460) - 20.43) = \\ & 0.00488 * (-(-0.5)) * e((0.0251) * (325 + 460) - 20.43) = 0.001 \text{ lb/ton} \end{aligned}$$

where: Ef = emission factor (lb/ton)  
V = default asphalt volatility (-0.5)  
T = default temperature (325)

$$15.48 \text{ tons/hr} * 0.001 \text{ lb CO/ton} * 1/2000 \text{ ton CO/lb CO} * 8760 \text{ hr/yr} = 0.07 \text{ tons/yr}$$

#### (4) Combined HAPs:

AP-42 states that the combined HAP emissions are 2.8% of the VOC emissions. The combined HAP emissions based on the AP-42 fraction of 2.8% is estimated to be 0.02 tons/yr.  
 $0.028 * 0.68 \text{ tons/yr} = 0.02 \text{ tons/yr}$

#### (b) Combustion Emissions:

The following calculations determine the proposed heater combustion emissions based on a maximum capacity of 1.86 MMBtu/hr, use of No. 2 fuel oil, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

$$\text{MMBtu/hr} * 1 \text{ gal}/0.140 \text{ MMBtu} * 1 \text{ kgal}/1000 \text{ gal} * \text{Ef lb/kgal} * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb} = \text{tons/yr}$$

	PM	PM10	SO2	NOx	VOC	CO	Worst Case Single HAP	Combined HAPS
lb/kgal	2.00	2.00	71.00	20.00	0.34	5.00	-	-
tons/yr	0.12	0.12	4.13	1.16	0.02	0.29	0.0001	0.0004

The total estimate UPTE is the sum of the proposed tank and heater emissions.

	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Combined HAPS (tons/yr)
Tanks	0.04	0.04	-	-	0.68	0.07	0.02	0.02
Heater	0.12	0.12	4.13	1.16	0.02	0.29	0.0001	0.0004
<b>Total</b>	<b>0.16</b>	<b>0.16</b>	<b>4.13</b>	<b>1.16</b>	<b>0.70</b>	<b>0.36</b>	<b>0.02</b>	<b>0.02</b>

#### (2) Emissions After Controls:

All applicable emissions are uncontrolled.

#### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA.”

This table reflects the PTE before controls due to the modification based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.16
PM-10	0.16
SO <sub>2</sub>	4.13
VOC	0.70
CO	0.36
NO <sub>x</sub>	1.16

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
Combined HAPs	0.02

The estimated PM, PM10, SO<sub>2</sub>, NO<sub>x</sub>, VOC, CO, single HAP, and combined HAP UPTE (0.16, 0.16, 4.13, 1.16, 0.70, 0.36, 0.02, and 0.02 tons per year) are less than their respective 326 IAC 2-8-11.1(d) Minor Permit Revision low end applicable levels of 5, 5, 10, 10, 10, 25, 10, and 25 tons per year, there are no changes to any existing conditions that are required, and there are no new applicable requirements that are triggered.

However, the natural gas and re-refined oil limits have been adjusted to ensure that the source NO<sub>x</sub> and SO<sub>2</sub> emissions are still less than their respective Part 70 applicable level of 100 tons per year.

Establishing these limits as federally enforceable, requires public notification. Since neither an Administrative Amendment nor a Minor Permit Revision require public notification, it is determined that adding the proposed limits cannot be accomplished via these approvals.

Therefore, the proposed modification shall be incorporated into the existing FESOP via a Significant Permit Revision pursuant to 326 IAC 2-8-11.1(f)(1) which states changes to an existing source FESOP that are not an Administrative Amendment or a Minor Permit Revision shall be incorporated into the existing source FESOP via a Significant Permit Revision.

### County Attainment Status

The source is located in Bartholomew County.

Pollutant	Status
PM <sub>10</sub>	attainment or unclassifiable
SO <sub>2</sub>	attainment or unclassifiable
NO <sub>2</sub>	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Bartholomew County has been designated as attainment or unclassifiable for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2.

- (b) Bartholomew County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

## Source Status

Source Emissions (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited), as obtained from the detailed emission calculations of the Technical Support Document (TSD) of First Significant Permit Revision 005-15124-00052, issued on March 18, 2002:

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Agg. Dryer Non-Combustion	44.15	10.25	-	-	17.18	-	-	-
RAP Dryer Non-Combustion	19.82	4.60	-	-	7.71	-	-	-
Agg./RAP Combustion	0.04	0.04	94.11	97.58	1.92	29.27	<10	9.63
Tank and Hot Oil Heaters	0.14	0.23	4.89	1.42	0.03	0.38	<10	0.03
Conveying/Handling	2.02	0.96	-	-	-	-	-	-
Unpaved Roads	81.92	16.37	-	-	-	-	-	-
Aggregate Storage	0.23	0.08	-	-	-	-	-	-
Cold Mix VOC Storage	-	-	-	-	72.16	-	-	-
Source	<b>148.32</b>	<b>32.53</b>	<b>99.00</b>	<b>99.00</b>	<b>99.00</b>	<b>29.65</b>	<b>&lt;10*</b>	<b>9.66*</b>

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

- \* The mixing and drying process specific worst case single HAP UPTE was determined to be less than 10 tons per year. The combined HAP UPTE was determined to be 9.63 tons/yr.

The existing source liquid asphalt storage and handling worst case single HAP emissions are determined to be less than 10 tons per year. The combined HAP emissions as determined utilizing the liquid asphalt throughput of 36 tons per hour and the existing liquid asphalt storage capacity fraction of 0.57, is estimated to be 0.03 tons per year.

36 total tons liquid asphalt/hr \* 0.57 existing ton liquid asphalt/total ton liquid asphalt = 20.52 tons/hr  
20.52 tons/hr \* 0.01 lb VOC/ton \* 0.028 lb combined HAP/lb VOC \* 1/2000 ton VOC/lb VOC \* 8760 hr/yr = 0.03 tons/yr

The hot oil heater HAP emissions are determined to be negligible because the combined capacity is 1.75 MMBtu/hr.

The source combined HAP emissions, based on the sum of the mixing and drying process combined HAP emissions (9.63 tons/yr), the existing source liquids asphalt storage and handling combined HAP emissions (0.03 tons/yr), and the hot oil heater combined HAP emissions (negligible emissions), is estimated to be 9.66 tons/yr.

9.63 tons/yr + 0.03 tons/yr + negligible emissions = 9.66 tons/yr

- (a) The mixing and drying operation PM emissions were limited in FESOP 005-14110-00052, under 40 CFR 60, Subpart I, to 0.04 gr/dscf which, combined with the other existing limitations and standards, and emission controls, reduced the source PM emissions to 148.32 tons per year.
- (b) The mixing and drying operation PM10 emissions were limited in FESOP 005-14110-00052, to 18.34 pounds per hour which, combined with the other existing limitations and standards, and emission controls, reduced the source PM10 emissions to 32.53 tons/yr.
- (c) In First Significant Permit Revision 005-15124-00052, the mixing and drying operation natural gas usage was limited to 697 million cubic feet (MMcf) per twelve (12) consecutive month period, rolled on a monthly basis which, combined with the other existing limitations and standards, limited the source NOx emissions to 99.00 tons per year.
- (d) In FESOP 005-14110-00052, the amount of gelled asphalt with VOC solvent liquid binder used in the production of cold mix asphalt was limited to 2,886 tons of VOC solvent per twelve (12) consecutive month period which lowered the cold mix asphalt VOC emissions to 72.16 tons per year which, combined with the other existing limitations and standards, limited the source VOC emissions to 99.00 tons per year.
- (e) In FESOP 005-14110-00052, the aggregate dryer burner distillate oil and waste oil sulfur contents were limited under 326 IAC 7-1.1 to 0.5 pounds per million Btu heat input or a sulfur content of less than or equal to 0.5% and 1.6 pounds per million Btu heat input or a sulfur content of less than or equal to 0.75%, respectively. The re-refined oil fuel use for the mixing and drying operations was limited in First Significant Permit Revision 005-15124-00052 to 1,707,211 gallons or it's equivalent. These limits reduced the source SO2 emissions to 99.00 tons per year.
- (f) The existing source is not a major PSD stationary source because no criteria pollutant emissions are greater than the applicable level or 250 tons per year or more and it is not one of the 28 listed source categories.
- (g) The existing source is a not a Part 70 major stationary source because no criteria pollutants exceed the applicable level of 100 tons per year and the single and combined HAP emissions are less than the respective applicable levels of 10 and 25 tons per year.

### **Emissions After the Modification**

Emissions after the modification based on emissions after controls and 8760 hours of operation per year at rated capacity, including all existing limitations and standards and the UPTE due to the proposed modification:

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Agg. Dryer Non-Combustion	44.15	10.25	-	-	17.18	-	-	-
RAP Dryer Non-Combustion	19.82	4.60	-	-	7.71	-	-	-
Agg./RAP Combustion	0.04	0.04	94.11	97.58	1.92	29.27	<10	9.63
Tank and Hot Oil Heaters	0.14	0.23	4.89	1.42	0.03	0.38	<10	0.03
Conveying/Handling	2.02	0.96	-	-	-	-	-	-
Unpaved Roads	81.92	16.37	-	-	-	-	-	-
Aggregate Storage	0.23	0.08	-	-	-	-	-	-
Cold Mix VOC Storage	-	-	-	-	72.16	-	-	-
Modification	0.16	0.16	4.13	1.16	0.70	0.36	<10	0.02
<b>Source</b>	<b>148.48</b>	<b>32.69</b>	<b>103.13</b>	<b>100.16</b>	<b>99.70</b>	<b>30.01</b>	<b>&lt;10</b>	<b>9.68</b>

  

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

After the proposed modification, the source SO2 and NOx PTE, each, exceed their respective Part 70 major source levels of 100 tons per year. To remain a FESOP source, a reduction in SO2 and NOx emissions must be implemented.

To ensure that the source SO2 emissions do not exceed the allowable level of 99 tons per year, the re-refined oil usage or it's equivalent shall be limited to a rate that is equivalent to the emissions associated with the existing re-refined oil usage limit (94.11 tons per year) less the SO2 emissions due to the proposed modification (4.13 tons/yr).

$$X \text{ gal/yr} * 110.3 \text{ lb SO}_2/1000 \text{ gal} * 1/2000 \text{ tons SO}_2/\text{lb SO}_2 = [94.11 \text{ tons SO}_2/\text{yr} - 4.13 \text{ tons SO}_2/\text{yr}]$$

$$= 89.98 \text{ tons SO}_2/\text{yr}$$

$$X = 1,631,550 \text{ gallons re-refined oil/yr}$$

The re-refined oil usage limit shall be reduced from 1,707,211 gallons per year to 1,631,550 gallons per year.

Reducing the fuel use limitation and applying all emission controls will also reduce the mixing and drying operation PM, PM10, NOx, VOC, CO, single HAP, and combined HAP emissions to 0.04, 0.03, 15.50, 0.82, 4.08, <10, and 9.21 tons per year.

To ensure that the source NOx emissions do not exceed the allowable level of 99 tons per year, the natural gas usage or it's equivalent shall be limited to a rate that is equivalent to the emissions associated with the existing natural gas usage limit (97.58 tons per year) less the SO2 emissions due to the proposed modification (1.16 tons/yr).

$$X \text{ MMcf/yr} * 280 \text{ lb/MMcf} * 1/2000 \text{ ton/lb} = [97.58 \text{ tons NO}_x/\text{yr} - 1.16 \text{ tons NO}_x/\text{yr}]$$

$$= 96.42 \text{ tons NO}_x/\text{yr}$$

$$X = 688 \text{ MMcf/yr}$$



The natural gas usage limit shall be reduced from 697 MMcf/yr to 688 MMcf/yr.

This fuel use limitation lowers the drying and mixing operation NOx emissions to 96.32 tons per year.

$$688 \text{ MMcf/yr} * 280 \text{ lb/MMcf} * 1/2000 \text{ ton/lb} = 96.32 \text{ tons NOx/yr}$$

Reducing the fuel use limitation and applying all emission controls will also reduce the mixing and drying operation combustion PM, PM10, SO2, VOC, CO, single HAP, and combined HAP emissions to 5.22E-4, 2.09E-3, 0.21, 1.89, 28.90, <10, and 9.54 tons per year.

The worst case emissions from the mixing and drying operations after application of the limits is listed below.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Re-refined Oil	<b>0.04</b>	<b>0.03</b>	<b>89.98</b>	15.50	0.82	4.08	<10	9.21
Natural Gas	5.22E-4	2.09E-3	0.21	<b>96.32</b>	<b>1.89</b>	<b>28.90</b>	<10	<b>9.54</b>

The source emissions after application of the proposed limitations are listed below.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Agg. Dryer Non-Combustion	44.15	10.25	-	-	17.18	-	-	-
RAP Dryer Non-Combustion	19.82	4.60	-	-	7.71	-	-	-
Agg./RAP Combustion	0.04	0.03	89.98	96.32	1.89	28.90	<10	9.54
Tank and Hot Oil Heaters	0.14	0.23	4.89	1.42	0.03	0.38	<10	0.03
Conveying/Handling	2.02	0.96	-	-	-	-	-	-
Unpaved Roads	81.92	16.37	-	-	-	-	-	-
Aggregate Storage	0.23	0.08	-	-	-	-	-	-
Cold Mix VOC Storage	-	-	-	-	72.16	-	-	-
Modification	0.16	0.16	4.13	1.16	0.70	0.36	<10	0.02
<b>Total</b>	<b>148.48</b>	<b>32.68</b>	<b>99.00</b>	<b>98.90</b>	<b>99.67</b>	<b>29.64</b>	<b>&lt;10</b>	<b>9.59</b>

PSD Major Levels	250	250	250	250	250	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

- (a) The source, after construction and operation of the proposed modification and implementation of the new fuel use limits, is still not a major PSD stationary source because no criteria pollutant emissions are greater than the applicable level or 250 tons per year or more and it is not one of the 28 listed source categories.

- (b) This source, after construction and operation of the proposed modification and implementation of the new fuel use limits, is still a not a Part 70 major stationary source because no criteria pollutants exceed the applicable level of 100 tons per year and the single and combined HAP emissions are less than the respective applicable levels of 10 and 25 tons per year.

### **Federal Rule Applicability**

#### **(a) New Source Performance Standards (NSPS):**

- (1) This source is still subject to New Source Performance Standard, 40 CFR 60, Subpart I. The proposed equipment will have no impact on the current requirements.
- (2) Tanks 22 is still subject to New Source Performance Standard, 40 CFR 60, Subpart Kb. The proposed equipment will have no impact on the current requirements.

However, upon review of the Technical Support Document (TSD) for FESOP 005-14110-00052, it was determined that there was an error made in the applicability determination.

The TSD states that since the Tank 22 was constructed after the applicable date of July 23, 1984, has a capacity greater than the 6.110b(a) applicable level of 40 cubic meters, and has a capacity greater than or equal to 75 cubic meters but less than 150 cubic meters and a true vapor pressure less than 15 kilopascals, the requirements of 40 CFR 60.116b(a), (b), and (d) apply.

However, pursuant to 40 CFR 60.110b(c), each tank with a capacity greater than or equal to 75 cubic meters but less than 150 cubic meters with a true vapor pressure less than 15 kilopascals, is only subject to paragraphs (a) and (b) of 40 CFR 60.116b. Tank 22 should have only been subject to 40 CFR 60.116b(a) and (b).

Therefore, the applicable requirements in the permit shall be changed appropriately.

- (3) The proposed storage tanks (Tanks 16 and 17) are not subject to the requirements of 40 CFR 60, Subpart K, "Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973 and Prior to May 19, 1978" because the tanks will be constructed after the applicable date of May 19, 1978.
- (4) The proposed storage tanks (Tanks 16 and 17) are not subject to the requirements of 40 CFR 60, Subpart Ka, "Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978 and Prior to July 23, 1984" because the tanks will be constructed after the applicable date of July 23, 1984.
- (5) Proposed storage tanks (Tanks 16 and 17) are subject to the requirements of 40 CFR 60, Subpart Kb, "Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984" because each tank's capacity (20,000 gallons) is greater than the applicable level of 10,567 gallons (40 cubic meters).

Pursuant to 40 CFR 60.110b(c), each tank with a capacity greater than or equal to 75 cubic meters (19,813 gallons) but less than 151 cubic meters (39,890 gallons) with a true vapor pressure less than 15 kilopascals, is only subject to paragraphs (a) and (b) of 40 CFR 60.116b.

Each tank's capacity (20,000 gallons) falls within the 40 CFR 60.110b(c) applicable range of 75 cubic meters (19,813 gallons) and 151 cubic meters (39,890 gallons) and the true vapor pressure (1.3 E-8 kPa) is less than the 40 CFR 60.110b(c) applicable level of 15 kPa. Therefore, only Paragraphs (a) and (b) of 60.116b apply.

Pursuant to 40 CFR 60.116b(a) and (b), the owner or operator shall, for each vessel, keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

Said records shall be kept for the life of the tanks.

**(b) National Emission Standards for Hazardous Air Pollutants (NESHAPs):**

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61) applicable to this source.

**State Rule Applicability**

**(a) Entire State Rule Applicability:**

**(1) 326 IAC 1-7 (Stack Height Provisions):**

The stack height provisions of 326 IAC 1-7 still apply. The proposed equipment will not affect the status of these requirements.

**(2) 326 IAC 2-6 (Emission Reporting):**

The emission reporting requirements of 326 IAC 2-6 still do not apply because the source VOC emissions after the proposed modification (99.67 tons per year) are less than the Bartholomew County applicable level of 100 tons per year.

**(3) 326 IAC 2-8 (FESOP):**

The existing limits that keep the source from being subject to the Part 70 requirements of 326 IAC 2-7 except the source re-refined oil and natural gas usage limits still apply because the proposed equipment will not affect the status of these limits.

The re-refined oil and natural gas usage limits shall be reduced from 1,707,211 to 1,631,550 gallons per consecutive 12 month period and the 697 to 688 million cubic feet per year, respectively, to reduce the source SO<sub>2</sub> and NO<sub>x</sub> emissions after the proposed modification back to less than their respective applicable levels of 100 tons per year.

**(4) 326 IAC 2-8-4(9) (Preventive Maintenance Plan)**

The 326 IAC 2-8-4(9) preventive maintenance plan requirements still apply. The proposed equipment will not affect the status of these requirements.

**(5) 326 IAC 4-1 (Open Burning):**

The requirements of 326 IAC 4-1 still apply. The proposed equipment will not affect the status of these requirements.

**(6) 326 IAC 4-2 (Incineration):**

The requirements of 326 IAC 4-2 still apply. The proposed equipment will not affect the status of these requirements.

**(7) 326 IAC 5-1 (Visible Opacity Limitations):**

The requirements of 326 IAC 5-1 still apply. The proposed equipment will not affect the status of these requirements.

**(8) 326 IAC 6-4 (Fugitive Dust Emissions):**

The fugitive dust requirements of 326 IAC 6-4 still apply. The proposed equipment will not affect the status of these requirements.

**(9) 326 IAC 6-5 (Fugitive PM Emissions):**

The fugitive PM emission requirements of 326 IAC 6-5 still apply. The proposed equipment will not affect the status of these requirements.

**(b) Individual Unit Sate Rules, Proposed Liquid Asphalt Storage Tanks:**

**(1) 326 IAC 2-4.1 (New Source Toxics Control)**

The requirements of 326 IAC 2-4.1-1 do not apply to the proposed modification because the single and combined HAP emissions are less than the respective applicable levels of 10 and 25 tons per year.

**(2) 326 IAC 8-4-3:**

The requirements of 326 IAC 8-4-3 do not apply to proposed Tanks 16 and 17 because each tank's capacity (20,000 gallons) is less than the applicable capacity of 39,000 gallons.

**(3) 326 IAC 8-9:**

The requirements of 326 IAC 8-9 do not apply to proposed Tanks 16 and 17 because the source is not located in any of the applicable counties (Lake, Porter, Clark, or Floyd).

**(4) 326 IAC 8-1-6:**

Although there are no other Article 8 rules that apply, the requirements of 326 IAC 8-1-6 do not apply to the proposed tanks because the VOC unrestricted potential to emit (UPTE), 0.70 tons per year, is less than the applicable level of 25 tons per year.

**Changes to the Permit**

The following lists the changes to the existing permit that are necessary to incorporate the proposed equipment. All added language indicated in bold type. All deleted information is struck-out.

**(1) Condition A.3:**

Condition A.3 shall be revised as follows to remove existing heater 17, remove existing Tank 16, add new heater 17, and add new tanks 16 and 17.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) one (1) distillate No. 2 fuel oil fired liquid asphalt tank heater, identified as emission unit No. 13, rated at 1.3 MMBtu per hour, exhausting at two (2) stacks, identified as S-2A and S-2B;
- (b) two (2) distillate No. 2 fuel oil fired liquid asphalt tank heaters, identified as emission unit Nos. 15 and 17, rated at 0.45 **and 1.86** MMBtu per hour, **respectively each, and with each the emissions from heater 15 being exhausted through at two (2) stacks, identified as S-4A and S-4B, and the emissions from heater 17 being exhausted through two (2) stacks, identified as S-6A, and S-6B;**
- (c) ~~three~~**four (34)** liquid asphalt storage tanks, identified as Tank 12, Tank 14, ~~and~~ Tank 16, **and Tank 17, each with respective a maximum storage capacities of 26,000, 26,000, 20,000, and 20,000** gallons;

.....

**(2) Condition D.1.5:**

Condition D.1.5 shall be amended as follows to revise the natural gas usage limit from 697 MMcf per consecutive 12 month period to 688 MMcf per consecutive 12 month period.

D.1.5 Natural Gas Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of natural gas to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to ~~697~~**688.0** million cubic feet (MMCF) per twelve (12) consecutive month period, rolled on a monthly basis. For purposes of determining compliance, the following shall apply:

.....

**(3) Condition D.1.6:**

Condition D.1.6 shall be amended as follows to revise the re-refined oil usage limit from 1,707,711 U.S. gallons per consecutive 12 month period to 1,631,550 gallons per consecutive 12 month period.

D.1.6 Re-refined Waste Oil Usage [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4(1), the input of re-refined waste oil to the 135 million Btu per hour burner for the aggregate dryer and the 75.6 million Btu per hour burner for the RAP dryer shall be limited, in total, to ~~1,707,711~~**1,631,550** U.S. gallons per twelve (12) consecutive month period, rolled on a monthly basis based on a maximum oil sulfur content of 0.75%.

.....

**(4) Unit Description of Section D.3:**

The unit description of Section D.3 shall be amended as follow to include proposed tanks 16 and 17.

### SECTION D.3 FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-8-4(10)]:

- (ea) one (1) re-refined waste oil storage tank, identified as Tank 22, constructed in 2000, with a maximum storage capacity of 21,000 gallons, exhausting at one (1) stack.
- (b) **Two (2) liquid asphalt storage tanks, identified as Tank 16 and Tank 17, each with a maximum storage capacity of 20,000 gallons.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### (5) Condition D.3.1:

Condition D.3.1 shall be amended as follows to remove the 40 CFR 60.116b(d) requirements and to add proposed tanks 16 and 17.

##### D.3.1 Record Keeping Requirements [326 IAC 12][40 CFR 60.110b, Subpart Kb]

- ~~(a) Pursuant to 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels), the owner or operator shall for one (1) re-refined waste oil storage tank (Tanks 22), 16, and 17, with a vapor pressure of less than 15.0 kPa, is subject to 40 CFR Part 60.116b, paragraphs (a), (b), and (d) which require record keeping keep readily accessible records showing the dimension and capacity of the storage tanks.~~
- ~~(b) To document compliance with paragraph (a) above, the Permittee shall maintain permanent records at the source in accordance with (1) through (3) below:~~
  - ~~(1) the dimension of the storage vessel;~~
  - ~~(2) an analysis showing the capacity of the storage vessel; and~~
  - ~~(3) the true vapor pressure of each VOC stored in the one (1) re-refined waste oil storage tank (Tank 22), indicating that the maximum true vapor pressure of VOC is less than 15.0 kPa.~~
- ~~(c) All Said records shall be maintained in accordance with Section C - General Record Keeping Requirements; of this permit except that the records specified in this condition shall be kept for the life of the respective tanks.~~

#### (6) SO2 Re-refined Oil and Equivalent Usage Limit Quarterly Report :

The SO2 re-refined oil and equivalent usage limit quarterly report shall be amended as follows to reflect the new re-refined oil usage limit.

.....

Limits: sulfur content of No. 2 distillate fuel not to exceed 0.5%; sulfur content of re-refined waste oil not to exceed 0.75%; and ~~1,707,211~~**1,631,550** gallons of re-refined waste oil and re-refined waste oil equivalent per last 12 consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.6(a) through (c) shall be used such that the total gallons of re-refined waste oil and re-refined waste oil equivalent input does not exceed the limit specified.

.....

**(7) NOx Natural Gas and Equivalent Usage Limit Quarterly Report :**

The NOx natural gas and equivalent usage limit quarterly report shall be amended as follows to reflect the new natural gas usage limit.

.....

Limits: ~~697~~**88.0** million cubic feet (MMCF) of natural gas and natural gas equivalents per last twelve (12) consecutive month period. For purposes of determining compliance with this limit, the fuel equivalency ratios in condition D.1.5(a) through (d) shall be used such that the total MMCF of natural gas and natural gas equivalents input does not exceed the limit specified.

.....

**(8) Table of Contents:**

The Table of Contents shall be adjusted to reflect the changes to the conditions that were made under First Significant Permit Revision 005-15124-00052.

**Conclusion**

The proposed tanks and heater shall be constructed and operated according to the provisions of the existing permit, Second Significant Permit Revision 005-17423-00052, and all other existing source approvals.